

## REMARKS

By this amendment, claims 2, 5-7, 9-12 and 14-46 are withdrawn from consideration, claim 1 is cancelled, claims 3, 4 and 13 are amended, and claims 47 and 48 are newly added. Currently, claims 2-48 are pending in the application.

Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification. In view of the above Amendments and the following Remarks, Applicants respectfully request reconsideration and withdrawal of the objections and rejections for the reasons discussed below.

### **Response to restriction/election of species requirement**

Applicants affirm the provisional election made to the Examiner during a telephone conversation on June 21, 2005 where an election was made without traverse to prosecute the invention of Group 1, Species 1, shown in Fig. 4, claims 1, 3, 4, 8 and 13.

It is also respectfully submitted that the subject matter of all claims is sufficiently related that a thorough search for the subject matter of any one Species would encompass a search for the subject matter of the remaining Species. Thus, it is respectfully submitted that the search and examination of the entire application could be made without serious burden. See MPEP §803 in which it is stated that "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." It is respectfully submitted that this policy should apply in the

present application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office. Thus, withdrawal of the Election of Species Requirement is respectfully requested.

**Claim 4 is an allowable claim**

Applicants appreciate the indication that claim 4 would be allowable if rewritten to overcome the claim objections and to include all of the limitations of the base claim and any intervening claims. While Applicants agree these claims are patentable over the cited references, Applicants do not agree that patentability resides in each feature exactly as expressed in the claims, nor that each feature is required for patentability of each claim.

**Objection to the Drawings**

The drawings were objected to because Figs. 1A, 1B, 2A, 2B, 3A, 3B and 3C failed to designate "Prior Art." This objection is respectfully traversed.

Figs. 1A, 1B, 2A, 2B, 3A, 3B and 3C are each amended to be designated as "Prior Art" as shown in the "Replacement Sheet of Drawings" attached hereafter.

Accordingly, Applicants respectfully request withdrawal of the objection to the drawing.

## **Claim Objections**

Claims 1 and 4 were objected to for purposes of formality. Claim 1 has been cancelled. Claim 4 is an allowable claim and has been rewritten in independent form to include all of the limitations of independent claim 1, which is the base claim. Additionally, the features of original claims 1 and 4 have been amended for purposes of formality according to the claim amendments suggested in the Office Action. Such amendments are not made for the purpose of avoiding prior art or narrowing the claimed invention, and no change in claim scope is intended. Applicants do not intend to relinquish any subject matter by these amendments. Accordingly, Applicants respectfully request withdrawal of the objection to claims 1 and 4.

## **Amendment of Allowable Claim 4 to include all of the limitations of Independent Claim 1**

On page 8 of the Office Action, the Examiner indicated that claim 4 would be allowable if rewritten to overcome the claim objections set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

Accordingly, Applicants have (1) rewritten allowable claim 4 to overcome the claim objections set forth in the Office Action, and (2) cancelled independent claim 1 and amended allowable claim 4 to include all of the limitations of independent claim 1, which is the base claim.

Therefore, for at least this reason, claim 4 patentably distinguishes over Miyanaga and it is respectfully requested that claim 4 be allowed.

**Rejection of Claims 1, 3, 8, and 13 under 35 U.S.C. §102(b)**

On page 6 of the Office Action, claims 1, 3, 8, and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,705,829 issued to Miyanaga et al. ("Miyanaga"). Claim 1 has been cancelled. Claims 3 and 13 have been amended to depend from independent claim 4.

Claims 3, 8 and 13 each depend from independent claim 4 and are patentable for at least the reasons discussed above. Since none of the other prior art of record, whether taken alone or in combination, discloses or suggests at least the claimed subject matter recited in independent claim 4, it is respectfully submitted that dependent claims 3, 8, and 13 are allowable, and prompt notification thereof is respectfully solicited.

**New Claims 47 and 48**

Claim 47 is newly added and recites patentably distinguishing features of the present invention. For example, claim 21, for example, recites, "... wherein the average number of grain boundaries of polycrystalline silicon which are formed in active channel regions of the driving thin film transistor and meet a current direction line is a natural number that is at least one or more less than the average number of grain boundaries of polycrystalline silicon which are formed in active channel regions of the switching thin film transistor and meet a current direction line for a unit area of active channels." Since none of the prior art of record teaches or suggests at least this limitation, Applicant respectfully requests that new claim 47 be allowed.

Claim 48 is newly added and recites patentably distinguishing features of the present invention. For example, new claim 48 recites: "... wherein the one or more thin

film transistors at the driving circuit portion include an average number of grain boundaries of polycrystalline silicon formed in active channel regions that meet a current direction line is a natural number that is at least one less than the average number of grain boundaries of polycrystalline silicon formed in active channel regions of the thin film transistor installed at the pixel portion that meet a current direction line for a unit area of active channels."

None of the prior art of record, including Miyanaga, discloses or suggests a thin film transistor at the driving circuit portion having a natural number of grain boundaries of polycrystalline silicon formed in an active region that meet a current direction line that is one or more less than the number of grain boundaries of polycrystalline silicon formed in an active region of a thin film transistor installed at the pixel portion that meet a current direction line.

Instead, for example, Miyanaga specifically discloses a liquid crystal device having (1) a periphery circuit with grain boundaries formed in a same direction as the crystal growth direction, e.g., current flow, so that current has greater mobility during an ON position, and (2) a pixel TFT with grain boundaries formed perpendicular to the crystal growth direction, e.g., current flow, so that the current must cross the grain boundaries thereby enabling the OFF current to be decreased. Miyanaga, column 2, lines 30-50. Thus, in Miyanaga, the number of grain boundaries of the periphery circuit that meet the current direction line is zero and not a natural number, as is recited in claim 48 of the present application.

Therefore, since none of the prior art of record teaches or suggests at least this limitation, Applicants respectfully request that new claim 48 be allowed.

## Conclusion

Applicants believe that a full and complete response has been made to the Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully Submitted,



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**AMENDMENTS TO THE DRAWINGS**

Attached in the Appendix are Replacement Sheets for Figs. 1A, 1B, 2A, 2B, 3A, 3B and 3C, which includes the changes, without markings, identified below.

Figs. 1A, 1B, 2A, 2B, 3A, 3B and 3C have been amended to be designated "Prior Art".